REMARKS

Reconsideration of the above-identified application in view of the amendments above and the remarks following is respectfully requested.

Claims 1-29 are in this case. Claims 1-29 have been rejected. Claims 1, 5, 6, 17, and 26-28 are now amended. Claim 3 is cancelled.

Abstract

The abstract is hereby replaced to conform to the proper language and format for an abstract of the disclosure, as requested by the Examiner.

Claim Objections

The Examiner has objected to claims 1-16 because of an informality. As correctly stated by the Examiner, in claim 1, line 2 "the device" refers back to "management unit". The claims are hereby accordingly amended, and the Examiner's objection is thus overcome.

35 U.S.C. § 112, Second paragraph Rejections

· The Examiner has rejected claims 5-6 and 27-29 under 35 USC § 112, second paragraph, as being indefinite for failing to point out an distinctly claim the subject matter which applicant regards as the invention. Claims 5 and 46 have now been amended, and the Examiner's objections are believed to have been overcome.

The Examiner has stated that in claims 5 and 6 the limitation "said at least one communication network" lacks antecedent basis.

Claim 5 of the present application is amended herein as follows:

> 5. The unit of claim 1, wherein said communications are performed over at least one communication network, and said at least one communication network is any one of the PSTN, the Internet, a cellular network, a radio network, and an optical fiber network.

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Claim 6 of the present application is amended herein as follows:

> 6. The unit of claim 1, wherein said <u>communications are performed over at least one communication network, and said</u> at least one communication network is the Internet and any one of the PSTN, the Internet, a cellular network, a radio network, and an optical fiber network.

The Examiner has stated that in claim 27 the limitation "the master server" lacks antecedent basis.

Claim 27 of the present application is amended herein as follows:

> 27. The system of claim 26, further comprising c) a billing mechanism for accumulating a transaction log at the subscriber end and retrieving data of said log to the <u>Internet connection management device</u>~~master server~~.

The Examiner has stated that in claim 28 the limitation "said user name" lacks antecedent basis.

Claim 28 of the present application is amended herein as follows:

> 28. A method of providing end to end communication over a TCP/IP based network <u>to a subscriber hub managing communications with at least one subscriber electronic device</u>, the method comprising:
>
> selecting a remote subscriber to establish said communication with,
>
> obtaining user address data for said remote subscriber,
>
> sending to a remote database said user ~~name~~ <u>address data</u> to obtain an IP address corresponding to said user address data of said remote subscriber, and
>
> if said IP address is obtained then establishing an end-to-end connection with said remote subscriber using said obtained IP address to address data packets of said communication.

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Applicant respectfully submits that the above amendments overcome the rejections.

35 U.S.C. § 102(b) Rejections – Hutton et al (US 6,108,704)

The Examiner has rejected claims 1-7, 11-12, 14-18, 23, 25-26 and 28 under 35 USC § 102(b) as being anticipated by Hutton et al. Claims 1, 17, 26, and 28 have now been amended. Claim 3 has been cancelled, and its features fully incorporated into currently amended claim 1.

The present invention establishes a peer to peer connection between a remote subscriber and an intelligent hub, which connects in turn to electronic devices, such as a computer or household appliance, such as a fax, telephone, or refrigerator, over an internal local area network (LAN). The user establishes a peer to peer connection between a remote device and the hub, and can then communicate with any devices connected to the LAN via the hub. The user may utilize the peer to peer connection for communications (such as Email or voice streaming), and for sending and receiving sensing and control signals to electronic devices connected to the LAN, without the mediation of servers. In an industrial environment the connected electronic devices may be different, but the manner in which the peer to peer connection is established, and the benefits to the user, remain the same. Once a peer to peer connection is established as described in the present invention, users can send Email, video-conference, control household systems, perform web hosting or E-commerce, and perform many other functions without requiring further support from an external server, thereby alleviating the difficulties of client-server communication over the Internet.

The Examiner states that Hutton discloses a system and a method for managing communication with remote subscribers in which a subscriber requests an IP address corresponding to the remote subscriber to an external location, and recording a response thereto. The subscriber sets up a peer to peer

connection with the remote subscriber, then uses the IP address for communicating with the remote subscriber. Hutton thus discloses a system for forming a peer to peer connection between two subscribers.

The peer to peer connection established by the present invention is not between two subscriber devices as in Hutton, but instead is between a remote subscriber device and a hub.. The established connection enables the subscriber to communicate with and control electronic devices connected to the hub over an internal LAN. The peer to peer connection established by the present invention thus provides the user with an entirely different kind of functionality than that disclosed by Hutton.

To further distinguish the present invention from prior art, and to expedite prosecution in this case, Applicants have amended claim 1 to recite:

> 1. A subscriber end digital communication management unit for managing communications between subscriber devices and with remote subscribers, the device unit comprising:
>
> an internal local area network (LAN) interface for interfacing with at least one subscriber electronic device over a LAN,
>
> an IP address manager for formulating a request for an IP address corresponding to a user defined remote subscriber, submitting said request to an external location and recording a response thereto, and
>
> a packet addresser, associated with said IP address manager, for addressing data packets to said user defined remote subscriber using an IP address taken from said recorded response, thereby to set up a peer to peer connection with said user defined remote subscriber.

According to the above amendment, the internal interface is a LAN, which interfaces with subscriber electronic devices. Applicant respectfully submits that the above amendment overcomes the rejection of claim 1 by Hutton's teachings under 35 U.S.C. 102(b), for the reasons that follow.

Hutton teaches a system in which peer to peer communications are established over a computer network between two processing units. In Hutton's

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exemplary embodiment, a processing unit includes a processor, a memory, an input device, and an output device, where the output device includes a modem for communicating over the network. Hutton presents processing unit embodiments in which input and output to the subscriber from the processing unit is performed with standard input and output devices including computer mouse, keyboard, disk drive, graphical user interface (GUI), and the like. In a preferred embodiment, the processing unit is implemented in a personal digital assistant (PDA) providing modem capabilities and input/output screens.

In the digital communication management unit of the present invention a connection is established between a subscriber and a hub for an internal LAN interface, which enables the subscriber to further connect to one or more electronic devices. The electronic devices of the present invention, may perform any function, and are not limited to standard input and output devices of a computer, whose output in any case it would make little sense to send to a remote subscriber.

Hutton clearly envisions a peer to peer connection between two individual terminal devices. Hutton's system provides a user with the capability of communicating with a single, specified remote subscriber, but does not enable the user to connect with a network of devices. Hutton teaches utilizing the peer to peer connection for communications such as email and messaging, and does not disclose utilizing the connection for control of electronic devices, such as a security sensor, telephone, cellular telephone, and other electronic utilities.

The present invention is of a method and apparatus of establishing peer to peer communications between a remote subscriber and the hub of a LAN, which is connected to one or more electronic devices. The established communications enable the subscriber to remotely communicate with and control the devices. Applicant is of the strong opinion that Hutton et al. alone does not teach nor provide motivation for the establishment of peer to peer communications with such a hub, and that the apparatus is clearly distinguished from the point-to-point Internet protocol disclosed by Hutton.

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Applicant thus asserts that independent claim 1 as amended herein is therefore allowable based on the above comments. Applicant believes that independent claims 17, 26 and 28 as amended herein are allowable based on the same arguments presented for claim 1. Claims 2-7, 11-12, 14-16, 18, 23, and 25, which are dependent, directly or indirectly, on claims 1, 17, 26, and 28, are likewise believed to be allowable as being dependent on an allowable main claim.

As such, it is Applicant's strong opinion that Hutton et al. does not anticipate nor render obvious the present invention as claimed.

35 U.S.C. § 103(a) Rejections – Hutton et al

The Examiner has rejected claim 8 under 35 USC § 103(a) as being unpatentable over Hutton et al. The Examiner states that Hutton discloses all the claimed subject matter except for using a backup power supply, which it would be obvious to use in order to keep the system running when the main power is down. Applicant respectfully submits that claim 8 is dependent upon claim 1, which is believed to be allowable as now amended. As such, it is Applicant's opinion that Hutton et al. does not render obvious the present invention as claimed.

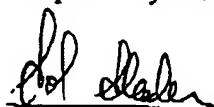### 35 U.S.C. § 103(a) Rejections – Hutton et al in view of Gordon

The Examiner has rejected claims 9-10 and 19-22 under 35 USC § 103(a) as being unpatentable over Hutton et al in view of Gordon (5,608,786). The Examiner states that Hutton discloses all the claimed subject matter except for the use of encryption and decryption, which is taught in Gordon. Applicant respectfully submits that claims 9-10 are dependent upon claim 1, and claims 19-22 are dependent on claim 17, which claims are believed to be allowable as now amended. As such, it is Applicant's opinion that Hutton et al. in view of Gordon does not render obvious the present invention as claimed.

35 U.S.C. § 103(a) Rejections – Hutton et al in view of Tanaka et al.

The Examiner has rejected claims 13, 24, 27, and 29 under 35 USC § 103(a) as being unpatentable over Hutton et al in view of Gordon (5,608,786). The Examiner states that Hutton discloses all the claimed subject matter except for the use of encryption and decryption, which is taught in Tanaka. Applicant respectfully submits that claim 13 is dependent upon claim 1, claim 24 is indirectly dependent upon claim 17, claim 27 is dependent upon claim 26, and claim 29 is dependent on claim 28, which claims are believed to be allowable as now amended. As such, it is Applicant's opinion that Hutton et al. in view of Tanaka does not render obvious the present invention as claimed.

In view of the above amendments and remarks it is respectfully submitted that independent claims 1, 17, 26, and 28, and all claims which directly or indirectly dependent therefrom are now in condition for allowance. Prompt notice of allowance is respectfully and earnestly solicited.

Respectfully submitted,

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Encl.
Two month's extension fee